

What is claimed is:

1. A binding releasably securable to an engagement member that includes a first side having a first receiver and a second side spaced from the first side and having a second receiver, comprising:
 - a) a base;
 - b) a first latch engaging said base and having a first rotational axis, a first position and a second position, said first latch being pivotable relative to said base between said first position and said second position about said first rotational axis so as to be engageable with the first receiver of the engagement member;
 - c) a second latch engaging said base in spaced relation to said first latch, said second latch for engaging the second receiver of the engagement member; and
 - d) a first rotational spring engaging said base and said first latch and having a second rotational axis substantially co-linear with said first rotational axis, said first rotational spring biasing said first latch into said first position.
2. A binding according to claim 1, wherein said rotational spring comprises a helical spring.
3. A binding according to claim 1, wherein said rotational spring comprises a torsional spring.
4. A binding according to claim 1, further comprising a second rotational spring having a third rotational axis substantially co-linear with said first rotational axis and engaging said first latch and said base and biasing said first latch into said first position.
5. A binding according to claim 4, wherein said first and second rotational springs are torsional springs.
6. A binding according to claim 1, wherein said second latch has a fourth rotational axis, a third position and a fourth position, said second latch being pivotable relative to said base between said third position and said fourth position about said fourth rotational axis, the binding further comprising a second rotational spring having a fifth rotational axis substantially co-linear with said fourth rotational axis and engaging said second latch and said base and biasing said second latch into said third position.

7. A binding according to claim 6, wherein said first rotational spring and said second rotational spring are torsional springs.
 8. A binding according to claim 1, wherein said first latch includes a first catch and said second latch includes a second catch, said first and second catches extending generally toward one another when said first latch is in said first position.
 9. A binding according to claim 1, wherein said first latch comprises a first catch and a second catch spaced from said first catch, and said second latch comprises a third catch and a fourth catch spaced from said third catch.
10. A binding according to claim 1, further including a crampon secured to said base.
11. A binding according to claim 1, wherein said base includes a toe member and a heel member, said first latch and second latch each positioned between said toe member and said heel member.
12. A binding according to claim 11, further including an adjustment mechanism attached to said toe member and said heel member for adjusting the position of said toe member and said heel member with respect to one another.
13. A binding according to claim 12, wherein said adjustment mechanism includes a threaded rod extending between said toe member and said heel member and threadedly engaging at least one of said toe member and said heel member.
14. A binding according to claim 11, further comprising a crampon secured to said toe member.
15. A binding system for securing a device to footwear, comprising:
- a) an engagement member that includes a first side having a first receiver and a second side spaced from said first side and having a second receiver;
 - b) a base;

- c) a first latch engaging said base and having a first rotational axis, a first position and a second position, said first latch being pivotable relative to said base between said first position and said second position about said first rotational axis so as to be engageable with said first receiver of said engagement member;
- d) a second latch engaging said base in spaced relation to said first latch, said second latch for engaging said second receiver of said engagement member; and
- e) a first rotational spring engaging said base and said first latch and having a second rotational axis substantially co-linear with said first rotational axis, said first rotational spring biasing said first latch into said first position.

16. A binding system according to claim 15, wherein said engagement member is formed separate from the footwear and is releasably securable to the footwear.

17. A binding system according to claim 15, wherein said engagement member is formed integrally with the footwear.

18. A binding system according to claim 15, wherein said first latch comprises a first catch and a second catch spaced from said first catch, and said second latch comprises a third catch and a fourth catch spaced from said third catch.

19. A binding system according to claim 18, wherein said first receiver comprises a first cavity for receiving said first catch and a second cavity for receiving said second catch, and said second receiver comprises a third cavity for receiving said third catch and a fourth cavity for receiving said fourth catch.

20. A binding according to claim 15, wherein said base includes a toe member and a heel member, said first latch and second latch each positioned between said toe member and said heel member.

21. A binding according to claim 20, further including an adjustment mechanism for adjusting the position of said toe member and said heel member with respect to one another.

22. A binding according to claim 21, wherein said adjustment mechanism includes a threaded rod extending between said toe member and said heel member and threadedly engaging at least one of said toe member and said heel member.
23. A binding capable of resisting a first force, comprising:
- a) a base;
 - b) a first latch engaging said base and having a first rotational axis, a first position and being pivotable into said first position about said first rotational axis, said first latch configured to receive the first force when said first latch is in said first position so that the first force biases said first latch into said first position; and
 - c) a first spring engaging said base and said first latch, said first spring biasing said first latch into said first position when the first force is not acting on said first latch.
24. A binding according to claim 23, wherein said first latch has a generally C-shaped portion having first and second extensions, said first latch including at least a first catch for receiving the first force and a leg generally parallel to, but spaced from, said first catch, said first catch and said leg forming said first and second extensions of the C-shape.
25. A binding according to claim 24, wherein said first latch includes a second catch spaced from said first catch, said first catch and said second catch for receiving the first force.
26. A binding according to claim 23, capable of resisting a second force and further comprising a second latch and a second spring, said second latch spaced from said first latch and having a second rotational axis, a second position and being pivotable into said second position about said second rotational axis, said second latch configured to receive the second force when said second latch is in said second position so that the second force biases said second latch into said second position.
27. A binding system according to claim 23, wherein said spring is a rotational spring.
28. A binding according to claim 23, further including a sole member attached to said base.

29. A binding according to claim 23, wherein the base includes a toe member and a heel member, said first latch and second latch each coupled between said toe member and said heel member.
30. A binding according to claim 29, further including an adjustment mechanism for adjusting the position of said toe member and said heel member with respect to one another.
31. A binding according to claim 30, wherein said adjustment mechanism includes a threaded rod extending between said toe member and said heel member and threadedly engaging at least one of said toe member and said heel member.
32. A binding for receiving footwear having a toe portion, a heel portion and an engagement member having a first receiver and a second receiver located on opposite sides of the engagement member, comprising:
 - a) a toe member for engaging the toe portion of the footwear;
 - b) a heel member spaced from said toe member by a distance, said heel member for engaging the heel portion of the footwear;
 - c) a first means for releasably engaging the first receiver and the second receiver; and
 - d) a second means for adjusting said distance between said toe and heel members, said second means extending between said toe and heel members.
33. A binding according to claim 32, wherein said second means includes a threaded rod extending between said toe member and said heel member and threadedly engaging at least one of said toe member and said heel member.
34. A binding according to claim 32, wherein said first means includes a first latch having at least one first catch for engaging the first receiver and a second latch having at least one second catch for engaging the second receiver.
35. A binding according to claim 34, wherein said first latch has a closed position and said first means further includes a rotational spring for biasing said first latch into said closed position.

36. A binding for securing footwear to a device, comprising:

- a) an engagement member securable to the footwear, said engagement member having a receiver defining a first cavity and a second cavity adjacent said first cavity, said first cavity having a cross-sectional shape that generally defines a first circular segment having a first half and a second half, said second cavity having a cross-sectional shape that generally defines a second circular segment having a third half and a fourth half;
- b) a first catch for engaging only one of said first half and said second half of said first cavity; and
- c) a second catch for engaging only one of said third half and said second half of said second cavity.

37. A binding according to claim 36, further including a base, said first and second catches coupled to said base.

38. A binding according to claim 37, further including a crampon secured to said base.

39. A binding according to claim 37, wherein said base further includes a toe member and a heel member, said first catch and second catch each coupled between said toe member and said heel member.

40. A binding according to claim 39, further including an adjustment mechanism for adjusting the position of said toe member and said heel member with respect to one another.

41. A binding according to claim 40, wherein said adjustment mechanism includes a threaded rod extending between said toe member and said heel member and threadedly engaging at least one of said toe member and said heel member.

42. A binding adapted for use with a receiver having a cavity in an environment containing a coherent material that intermittently becomes lodged within the cavity during use of the binding, comprising:

- a) a latch having a closed position and a pivot axis, said latch attached to the binding for pivotal movement about said pivot axis;

- b) a catch attached to said latch in spaced relationship to said pivot axis and adapted for removing the coherent material from the cavity; and
 - c) an opening extending through said latch and located between said pivot axis and said catch, said aperture adapted to allow the coherent material removed from the cavity by said catch to be expelled from the region surrounding the cavity.
43. A binding according to claim 42, further comprising a rotational spring having a rotational axis substantially co-linear with said pivot axis and engaging said first latch, said rotational spring biasing said first latch into said closed position.
44. A binding according to claim 42, further including a base, said first and second catches coupled to said base.
45. A binding according to claim 42, wherein said base further includes a toe member and a heel member, said first latch and second latch each positioned between said toe member and said heel member.
46. A binding according to claim 45, further including an adjustment mechanism for adjusting the position of said toe member and said heel member with respect to one another.
47. A binding according to claim 46, wherein said adjustment mechanism includes a threaded rod extending between said toe member and said heel member and threadedly engaging at least one of said toe member and said heel member.
48. A snowshoe for use with an engagement member, comprising:
- a) a floatation device;
 - b) a binding comprising:
 - i) a base secured to said floatation device;
 - ii) a first latch engaging said base and having a first rotational axis, a first position and a second position, said first latch being pivotable relative to said base between said first position and said second position about said first rotational axis so as to be engageable with the first receiver of the engagement member;

- iii) a second latch engaging said base in spaced relation to said first latch, said second latch for engaging the second receiver; and
 - iv) a first rotational spring engaging said base and said first latch and having a second rotational axis substantially co-linear with said first rotational axis, said first rotational spring biasing said first latch into said first position.
49. A binding according to claim 48, wherein said floatation device comprises a frame and webbing attached to said frame, said binding being secured to at least one of said frame and said webbing.
50. A binding according to claim 48, wherein said rotational spring comprises a helical spring.
51. A binding according to claim 48, wherein said rotational spring comprises a torsional spring.
52. A binding releasably securable to an engagement member, comprising:
- a) a base having an upper surface;
 - b) a first means engaging said base for releasably engaging the engagement member, said first means being self clamping upon application of a force substantially normal to, and directed away from, said upper surface of said base.
53. A binding according to claim 52, wherein said base includes a toe member and a heel member spaced from said toe member by a distance, said binding further including a second means for varying said distance between said toe member and said heel member.
54. A binding according to claim 52, wherein the engagement member has a receiver and a coherent material may become lodged in the receiver, said binding further including a second means for ejecting the coherent material from the receiver and away from the engagement member.
55. A binding according to claim 52, wherein said first means includes a second means for biasing said first means into engagement with the engagement member when the binding is secured to the engagement member.

56. A binding adapted for use with a receiver having a cavity in an environment containing a coherent material that intermittently becomes lodged within the cavity during use of the binding, comprising:
- a base;
 - a first means engaging said base for releasably engaging the receiver, said first means including a second means for ejecting the coherent material from the cavity and a third means for allowing the coherent material ejected from the cavity to move away from the receiver.
57. A binding according to claim 56, wherein said second means includes at least two points for breaking apart the coherent material.
58. A binding according to claim 56, wherein the cavity has an arcuate surface and said second means ejects the coherent material by causing the coherent material to slide substantially as a coherent unit along the arcuate surface.
59. A binding according to claim 56, wherein said first means includes a latch pivotably attached to said base.
60. A binding according to claim 59, wherein said third means includes an opening extending through said latch.
61. A method of engaging footwear with a binding, the footwear including an engagement member having a receiver defined by at least one cavity, comprising the steps of:
- providing a binding that includes a base having an upper surface, a longitudinal centerline, a latch pivotably attached to said base so as to be pivotable in a plane substantially perpendicular to said longitudinal axis and a biasing member, said latch having an engagement surface for slidably engaging the engagement member, said biasing member biasing said latch toward said longitudinal axis;
 - stepping into said binding generally in the direction of said upper surface such that the engagement member engages the engagement surface so as to first cause said latch to pivot away from said longitudinal axis against the bias of said biasing member and

then cause said latch to engage, via the bias of said biasing member, the at least one cavity of the engagement member.

62. A method of adjusting a binding to suit footwear having a size, comprising the steps of:

- a) providing a binding having a toe member, a heel member spaced from said toe member by a distance, an adjustment mechanism extending between, and engaging, said toe member and said heel member, a first latch positioned between said toe member and said heel member and a second latch spaced from said first latch and positioned between said toe member and said heel member;
- b) adjusting said adjusting mechanism such that said distance between said toe member and said heel member is suited to the size of the footwear.

63. A method of ejecting a coherent material from a receiver of an engagement member, wherein the receiver comprises a cavity having an arcuate surface, comprising the steps of:

- a) providing a binding that includes a latch having a catch for engaging the cavity;
- b) engaging said catch with said cavity such that said catch causes the coherent material to slide along the arcuate surface as a substantially coherent unit.

64. A binding for resisting a force having a direction, comprising:

- a) a base;
- b) a latch pivotally engaging said base and having:
 - i) a position;
 - ii) a rotational axis;
 - iii) an engagement surface for receiving the force;
 - iv) a vertical offset between said rotational axis and said engagement surface, said vertical offset being substantially parallel to the direction of the force; and
 - v) a lateral offset between said rotational axis and said engagement surface, said longitudinal offset being substantially perpendicular to the direction of the force and located such that when the force is applied to said engagement surface, said latch is biased into said position about said rotational axis; and
- c) a means for biasing said latch into said position when the force is not acting on said engagement surface.

65. An engagement member engagable with a pivotable latch comprising a first catch having a substantially planar lower surface and a generally frusto-conically-shaped upper surface, the engagement member comprising:
- a) a first surface for engaging the upper surface of the first catch while the engagement member is being engaged with the catch to pivot the latch; and
 - b) a recess for receiving the first catch of the latch, said recess having a substantially planar second surface for contacting the lower surface of the first catch and a generally frusto-conical third surface for confrontingly engaging the upper surface of the first catch.
66. An engagement member according to claim 65, wherein the latch further includes a second catch spaced from the first catch and said recess receives said first catch and said second catch when the engagement member is engaged with the latch.
67. An engagement member according to claim 66, wherein the recess comprises a first cavity for receiving the first catch and a second cavity for receiving the second catch.